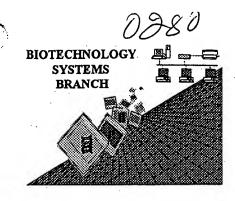# RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following CRF diskette:

Application Serial Number: _09/458,813_

Art Unit / Team No. : _OIPE_

Date Processed by STIC: _12/30/99_

THE ATTACHED PRINTOUT EXPLAINS THE **ERRORS DETECTED.**

PLEASE BE SURE TO FORWARD THIS INFORMATION TO THE APPLICANTS BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANTS ALONG WITH A NOTICE TO COMPLY or,

2) CALLING APPLICANTS AND FAXING THEM A COPY OF THE PRINTOUT WITH A NOTICE TO COMPLY

THIS WILL INSURE THAT THE NEXT SUBMISSION RECEIVED FROM THEM WILL BE ERROR FREE.

IF YOU HAVE ANY FURTHER QUESTIONS, PLEASE CALL:

MARK SPENCER 703-308-4212

Raw Sequence Listing Error Summary

ERROR DETECTED   **SUGGESTED CORRECTION**   SERIAL NUMBER: _09/458,813_

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 _____ Wrapped Nucleics
The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".

2 _____ Wrapped Aminos
The amino acid number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".

3 _____ Incorrect Line Length
The rules require that a line not exceed 72 characters in length. This includes spaces.

4 _____ Misaligned Amino Acid Numbering
The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs
between the numbering. It is recommended to delete any tabs and use spacing between the numbers.

5 _____ Non-ASCII
This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.

6 _____ Variable Length
Sequence(s) _____ contain n's or Xaa's which represented more than one residue.
As per the rules, each n or Xaa can only represent a single residue.
Please present the maximum number of each residue having variable length and
indicate in the (ix) feature section that some may be missing.

7 _____ PatentIn ver. 2.0 "bug"
A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
sequence(s) _____. Normally, PatentIn would automatically generate this section from the
previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section
to the subsequent amino acid sequence.

8 _____ Skipped Sequences (OLD RULES)
Sequence(s) _____ missing. If intentional, please use the following format for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X:
(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:
This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).

9 _____ Skipped Sequences (NEW RULES)
Sequence(s) _____ missing. If intentional, please use the following format for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

10 _____ Use of n's or Xaa's (NEW RULES)
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

11 _____ Use of <213>Organism (NEW RULES)
Sequence(s) _____ are missing this mandatory field or its response.

12 _____ Use of <220>Feature (NEW RULES)
Sequence(s) _____ are missing the <220>Feature and associated headings.
Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"
Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of new Rules)

13 _____ PatentIn ver. 2.0 "bug"
Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted
file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).
Instead, please use "File Manager" or any other means to copy file to floppy disk.

AKS-Biotechnology Systems Branch- 5/15/99

> This Raw Listing contains the General Information
> Section and up to first 5 pages.

```
 1   <110> APPLICANT: Murphy, Brian R.
 2         Collins, Peter L.
 3         Durbin, Anna P.
 4         Skiadopoulos, Mario H.
 5         Tao, Tao
 6   <120> TITLE OF INVENTION: USE OF RECOMBINANT LIVE-ATTENUATED PARAINFLUENZA VIRUS
 7         (PIV) AS A VECTOR TO PROTECT AGAINST DISEASE CAUSED BY
 8         PIV AND RESPIRATORY SYNCYTIAL VIRUS (RSV)
 9   <130> FILE REFERENCE: 17634-000330
10   <140> CURRENT APPLICATION NUMBER: US/09/458,813
11   <141> CURRENT FILING DATE: 1999-12-10
12   <150> EARLIER APPLICATION NUMBER: 09/083,793
13   <151> EARLIER FILING DATE: 1998-05-22
14   <150> EARLIER APPLICATION NUMBER: 60/047,575
15   <151> EARLIER FILING DATE: 1997-05-23
16   <150> EARLIER APPLICATION NUMBER: 60/059,385
17   <151> EARLIER FILING DATE: 1997-09-19
18   <160> NUMBER OF SEQ ID NOS: 30
19   <170> SOFTWARE: PatentIn Ver. 2.1
20   <210> SEQ ID NO 1
21   <211> LENGTH: 42
22   <212> TYPE: DNA
23   <213> ORGANISM: Artificial Sequence
24   <220> FEATURE:
25   <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
26         insert to conform inserted sequence to rule of
27         six.
28   <400> SEQUENCE: 1
29         cttaagaata tacaaataag aaaaacttag gattaaagag cg                     42
30   <210> SEQ ID NO 2
31   <211> LENGTH: 36
32   <212> TYPE: DNA
33   <213> ORGANISM: Artificial Sequence
34   <220> FEATURE:
35   <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
36         insert to conform inserted sequence to rule of
37         six.
38   <400> SEQUENCE: 2
39         gatccaacaa agaaacgaca ccgaacaaac cttaag                           36
40   <210> SEQ ID NO 3
41   <211> LENGTH: 101
42   <212> TYPE: DNA
43   <213> ORGANISM: Artificial Sequence
44   <220> FEATURE:
```

```
45   <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
46         insert to conform inserted sequence to rule of
47         six.
48   <400> SEQUENCE: 3
49         aggcctaaaa gggaaatata aaaaacttag gagtaaagtt acgcaatcca actctactca 60
50         tataattgag gaaggaccca atagacaaat ccaaattcga g              101
51   <210> SEQ ID NO 4
52   <211> LENGTH: 79
53   <212> TYPE: DNA
54   <213> ORGANISM: Artificial Sequence
55   <220> FEATURE:
56   <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
57         insert to conform inserted sequence to rule of
58         six.
59   <400> SEQUENCE: 4
60         tcataattaa ccataatatg catcaatcta tctataatac aagtatatga taagtaatca 60
61         gcaatcagac aataggcct                                      79
62   <210> SEQ ID NO 5
63   <211> LENGTH: 69
64   <212> TYPE: DNA
65   <213> ORGANISM: Artificial Sequence
66   <220> FEATURE:
67   <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
68         insert to conform inserted sequence to rule of
69         six.
70   <400> SEQUENCE: 5        see item 10 on Even Summary Sheet
71         nnnaggaaaa gggaaatata aaaacttagg agtaaagtta cgcgtgttaa cttcgaagag 60
72         ctccctnnn                                                 69
73   <210> SEQ ID NO 6
74   <211> LENGTH: 44
75   <212> TYPE: DNA
76   <213> ORGANISM: Artificial Sequence
77   <220> FEATURE:
78   <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
79         insert to conform inserted sequence to rule of
80         six.                                         item 10
81   <400> SEQUENCE: 6
82         nnnaggaaaa gggaacgcgt gttaacttcg aagagctccc tnnn          44
83   <210> SEQ ID NO 7
84   <211> LENGTH: 6
85   <212> TYPE: DNA
86   <213> ORGANISM: Artificial Sequence
87   <220> FEATURE:
88   <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
89         insert to conform inserted sequence to rule of
90         six.
91   <400> SEQUENCE: 7
92         ctaaat                                                    6
93   <210> SEQ ID NO 8
94   <211> LENGTH: 6
```

W-->   71
W-->   72

W-->   82

```
 95    <212> TYPE: DNA
 96    <213> ORGANISM: Artificial Sequence
 97    <220> FEATURE:
 98    <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
 99          insert to conform inserted sequence to rule of
100          six.
101    <400> SEQUENCE: 8
102          cttaag                                                        6
103    <210> SEQ ID NO 9
104    <211> LENGTH: 6
105    <212> TYPE: DNA
106    <213> ORGANISM: Artificial Sequence
107    <220> FEATURE:
108    <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
109          insert to conform inserted sequence to rule of
110          six.
111    <400> SEQUENCE: 9
112          tcaatc                                                        6
113    <210> SEQ ID NO 10
114    <211> LENGTH: 28
115    <212> TYPE: DNA
116    <213> ORGANISM: Artificial Sequence
117    <220> FEATURE:
118    <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
119          insert to conform inserted sequence to rule of
120          six.
121    <400> SEQUENCE: 10
122          acaacgagac cggataaatg ccttctac                                28
123    <210> SEQ ID NO 11
124    <211> LENGTH: 67
125    <212> TYPE: DNA
126    <213> ORGANISM: Artificial Sequence
127    <220> FEATURE:
128    <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
129          insert to conform inserted sequence to rule of
130          six.
131    <400> SEQUENCE: 11
132          attattgctt aaggtttgtt cggtgtcgtt tctttgttgg atcctatctg cgattggttc 60
133          catcttc                                                       67
134    <210> SEQ ID NO 12
135    <211> LENGTH: 34
136    <212> TYPE: DNA
137    <213> ORGANISM: Artificial Sequence
138    <220> FEATURE:
139    <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
140          insert to conform inserted sequence to rule of
141          six.
142    <400> SEQUENCE: 12
143          agacaatntc ntndrmrvsa gtntcntndn ntag                         34
144    <210> SEQ ID NO 13
```

W--> 143 _item 10_

```
145  <211> LENGTH: 6
146  <212> TYPE: DNA
147  <213> ORGANISM: Artificial Sequence
148  <220> FEATURE:
149  <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
150       insert to conform inserted sequence to rule of
151       six.
152  <400> SEQUENCE: 13
153       aggcct                                                         6
154  <210> SEQ ID NO 14
155  <211> LENGTH: 55
156  <212> TYPE: DNA
157  <213> ORGANISM: Artificial Sequence
158  <220> FEATURE:
159  <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
160       insert to conform inserted sequence to rule of
161       six.
162  <400> SEQUENCE: 14
163       gacaataggc ctaaaaggga aatataaaaa acttaggagt aaagttacgc aatcc       55
164  <210> SEQ ID NO 15
165  <211> LENGTH: 68
166  <212> TYPE: DNA
167  <213> ORGANISM: Artificial Sequence
168  <220> FEATURE:
169  <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
170       insert to conform inserted sequence to rule of
171       six.
172  <400> SEQUENCE: 15
173       gtagaacgcg tttatccggt ctcgttgtgg tgacatctcg aatttggatt tgtctattgg 60
174       gtccttcc                                                       68
175  <210> SEQ ID NO 16
176  <211> LENGTH: 68
177  <212> TYPE: DNA
178  <213> ORGANISM: Artificial Sequence
179  <220> FEATURE:
180  <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
181       insert to conform inserted sequence to rule of
182       six.
183  <400> SEQUENCE: 16
184       gtagaacgcg tttatccggt ctcgttgtgg tgacatctcg aatttggatt tgtctattgg 60
185       gtccttcc                                                       68
186  <210> SEQ ID NO 17
187  <211> LENGTH: 28
188  <212> TYPE: DNA
189  <213> ORGANISM: Artificial Sequence
190  <220> FEATURE:
191  <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
192       insert to conform inserted sequence to rule of
193       six.
194  <400> SEQUENCE: 17
```

```
195          ccatgtaatt gaatccccca acactagc                                28
196    <210> SEQ ID NO 18
197    <211> LENGTH: 28
198    <212> TYPE: DNA
199    <213> ORGANISM: Artificial Sequence
200    <220> FEATURE:
201    <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
202          insert to conform inserted sequence to rule of
203          six.
204    <400> SEQUENCE: 18
205          cggataaacg cgttctacaa agataacc                                28
206    <210> SEQ ID NO 19
207    <211> LENGTH: 28
208    <212> TYPE: DNA
209    <213> ORGANISM: Artificial Sequence
210    <220> FEATURE:
211    <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
212          insert to conform inserted sequence to rule of
213          six.
214    <400> SEQUENCE: 19
215          cggataaacg cgttctacaa agataacc                                28
216    <210> SEQ ID NO 20
217    <211> LENGTH: 23
218    <212> TYPE: DNA
219    <213> ORGANISM: Artificial Sequence
220    <220> FEATURE:
221    <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
222          insert to conform inserted sequence to rule of
223          six.
224    <400> SEQUENCE: 20
225          gggccatgga agattacagc aat                                     23
226    <210> SEQ ID NO 21
227    <211> LENGTH: 25
228    <212> TYPE: DNA
229    <213> ORGANISM: Artificial Sequence
230    <220> FEATURE:
231    <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
232          insert to conform inserted sequence to rule of
233          six.
234    <400> SEQUENCE: 21
235          caataagctt aaagcattag ttccc                                   25
236    <210> SEQ ID NO 22
237    <211> LENGTH: 31
238    <212> TYPE: DNA
239    <213> ORGANISM: Artificial Sequence
240    <220> FEATURE:
241    <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
242          insert to conform inserted sequence to rule of
243          six.
244    <400> SEQUENCE: 22
```

VERIFICATION SUMMARY
PATENT APPLICATION **US/09/458,813**

Input Set: **I458813.RAW**

Line	?	Error/Warning	Original Text
71	W	"N" or "Xaa" used: Feature required	nnnaggaaaa gggaaatata aaaacttagg agtaaagt
72	W	"N" or "Xaa" used: Feature required	ctccctnnn
82	W	"N" or "Xaa" used: Feature required	nnnaggaaaa gggaacgcgt gttaacttcg aagagctc
143	W	"N" or "Xaa" used: Feature required	agacaatntc ntndrmrvsa gtntcntndn ntag